

#8



SEQUENCE LISTING

<110> Watowich, Stanley J.
Weaver, Scott C.
Davey, Robert A.

<120> Drug Discovery Methods

<130> 265.00260101

<140> US 09/981,286

<141> 2001-10-15

<150> US 60/240,187

<151> 2000-10-13

<160> 36

<170> PatentIn version 3.0

<210> 1

<211> 157

<212> PRT

<213> VENEZUELAN EQUINE ENCEPHALITIS VIRUS

<400> 1

Val	Met	Lys	Leu	Glu	Ser	Asp	Lys	Thr	Phe	Pro	Ile	Met	Leu	Glu	Gly
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Lys	Ile	Asn	Gly	Tyr	Ala	Cys	Val	Val	Gly	Gly	Lys	Leu	Phe	Arg	Pro
		20					25					30			
Met	His	Val	Glu	Gly	Lys	Ile	Asp	Asn	Asp	Val	Leu	Ala	Ala	Leu	Lys
	35					40					45				
Thr	Lys	Lys	Ala	Ser	Lys	Tyr	Asp	Leu	Glu	Tyr	Ala	Asp	Val	Pro	Gln
	50				55					60					

Asn Met Arg Ala Asp Thr Phe Lys Tyr Thr His Glu Lys Pro Gln Gly
 65 70 75 80
 Tyr Tyr Ser Trp His His Gly Ala Val Gln Tyr Glu Asn Gly Arg Phe
 85 90 95
 Thr Val Pro Lys Gly Val Gly Ala Lys Gly Asp Ser Gly Arg Pro Ile
 100 105 110
 Leu Asp Asn Gln Gly Arg Val Val Ala Ile Val Leu Gly Gly Val Asn
 115 120 125
 Glu Gly Ser Arg Thr Ala Leu Ser Val Val Met Trp Asn Glu Lys Gly
 130 135 140
 Val Thr Val Lys Tyr Thr Pro Glu Asn Cys Glu Gln Trp
 145 150 155

<210> 2

<211> 11

<212> PRT

<213> ARTIFICIAL

<220>

<223> Cell-permeant polypeptide

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Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg
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<210> 3

<211> 16

<212> PRT

<213> ARTIFICIAL

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<223> Cell-permeant polypeptide

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<210> 4

<211> 16

<212> PRT

<213> ARTIFICIAL

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<223> Cell-permeant polypeptide

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Arg Gln Ile Lys Ile Trp Phe Pro Asn Arg Arg Met Lys Trp Lys Lys
1 5 10 15

<210> 5

<211> 16

<212> PRT

<213> ARTIFICIAL

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<223> Cell-permeant polypeptide

<400> 5

Arg Gln Pro Lys Ile Trp Phe Pro Asn Arg Arg Pro Lys Trp Lys Lys
1 5 10 15

<210> 6

<211> 525

<212> DNA

<213> ARTIFICIAL

<220>

<223> Nucleotide sequence encoding tat-CCD

<400> 6

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acgttcccaa tcatgttggg agggagata aacggctacg cttgtgtggt cggaggggag	120
ttattcaggc cgatgcatgt ggaaggcaag atcgacaacg acgttctggc cgcgcttaag	180
acgaagaaag catccaaata cgatcttgag tatgcagatg tgccacagaa catgcggggc	240
gatacattca aatacaccca tgagaaaccc caaggctatt acagctggca tcatggagca	300
gtccaatatg aaaatgggcg tttcacggtg ccgaaaggag ttggggccaa gggagacagc	360
ggacgaccca ttctggataa ccagggacgg gtggtcgcta ttgtgctggg aggtgtgaat	420
gaaggatcta ggacagccct ttcagtcgtc atgtggaaca agcttgatc ttctctcgag	480
ggagttaccg tgaagtatac tccggagaac tgcgagcaat ggtaa	525

<210> 7

<211> 169

<212> PRT

<213> ARTIFICIAL

<220>

<223> Amino acid sequence of tat-CCD

<400> 7

Met Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Val Met Lys Leu
1 5 10 15
Glu Ser Asp Lys Thr Phe Pro Ile Met Leu Glu Gly Lys Ile Asn Gly
20 25 30
Tyr Ala Cys Val Val Gly Gly Lys Leu Phe Arg Pro Met His Val Glu
35 40 45
Gly Lys Ile Asp Asn Asp Val Leu Ala Ala Leu Lys Thr Lys Lys Ala
50 55 60
Ser Lys Tyr Asp Leu Glu Tyr Ala Asp Val Pro Gln Asn Met Arg Ala
65 70 75 80
Asp Thr Phe Lys Tyr Thr His Glu Lys Pro Gln Gly Tyr Tyr Ser Trp
85 90 95
His His Gly Ala Val Gln Tyr Glu Asn Gly Arg Phe Thr Val Pro Lys
100 105 110
Gly Val Gly Ala Lys Gly Asp Ser Gly Arg Pro Ile Leu Asp Asn Gln
115 120 125
Gly Arg Val Val Ala Ile Val Leu Gly Gly Val Asn Glu Gly Ser Arg
130 135 140
Thr Ala Leu Ser Val Val Met Trp Asn Glu Lys Gly Val Thr Val Lys
145 150 155 160
Tyr Thr Pro Glu Asn Cys Glu Gln Trp
165

<210> 8

<211> 124

<212> PRT

<213> BOS TAURUS

<400> 8

Lys Glu Thr Ala Ala Ala Lys Phe Glu Arg Gln His Met Asp Ser Ser
1 5 10 15

Thr Ser Ala Ala Ser Ser Ser Asn Tyr Cys Asn Gln Met Met Lys Ser
 20 25 30
 Arg Asn Leu Thr Lys Asp Arg Cys Lys Pro Val Asn Thr Phe Val His
 35 40 45
 Glu Ser Leu Ala Asp Val Gln Ala Val Cys Ser Gln Lys Asn Val Ala
 50 55 60
 Cys Lys Asn Gly Gln Thr Asn Cys Tyr Gln Ser Tyr Ser Thr Met Ser
 65 70 75 80
 Ile Thr Asp Cys Arg Glu Thr Gly Ser Ser Lys Tyr Pro Asn Cys Ala
 85 90 95
 Tyr Lys Thr Thr Gln Ala Asn Lys His Ile Ile Val Ala Cys Glu Gly
 100 105 110
 Asn Pro Tyr Val Pro Val His Phe Ala Ala Ser Val
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<210> 9

<211> 37

<212> DNA

<213> ARTIFICIAL

<220>

<223> Primer

<400> 9

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37

<210> 10

<211> 42

<212> DNA

<213> ARTIFICIAL

<220>

<223> Primer

<400> 10

gaattcggat cctcattacc attgctcgca gttctccgga gt

42

<210> 11

<211> 6

<212> PRT

<213> ARTIFICIAL

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<223> A variable region amino acid sequence

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<223> Any amino acid

<400> 11

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<210> 12

<211> 477

<212> DNA

<213> VENEZUELAN EQUINE ENCEPHALITIS VIRUS

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aacgacgttc tggccgcgct taagacgaag aaagcatcca aatacgatct tgagtatgca	180
gatgtgccac agaacatgcg ggccgataca ttcaaataca cccatgagaa accccaaggc	240
tattacagct ggcacatcatgg agcagtcctaa tatgaaaatg ggcgtttcac ggtgccgaaa	300
ggagttgggg ccaagggaga cagcggacga ccatttctgg ataaccaggg acgggtggtc	360
gctattgtgc tgggaggtgt gaatgaagga tctaggacag ccctttcagt cgtcatgtgg	420
aacgagaagg gagttaccgt gaagtatact ccggagaact gcgagcaatg gtaatga	477

<210> 13

<211> 43

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<400> 13
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43

<210> 14

<211> 33

<212> DNA

<213> ARTIFICIAL

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<400> 14
ctagctaagc ttgttccaca tgacgactga aag

33

<210> 15

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<212> DNA

<213> ARTIFICIAL

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ctagctgcgg ccgctcatta ccattgctcg cagttc

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<210> 16

<211> 47

<212> DNA

<213> ARTIFICIAL

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<223> Primer

<400> 16
agctagaagc ttggatcttc tctcgaggga gttaccgtga agtatac

47

<210> 17

<211> 50

<212> DNA

<213> ARTIFICIAL

<220>

<223> Primer

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gacctcgcag agaagatccg gatccgttcc acatgacgac tgaaagggt

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<210> 18

<211> 51

<212> DNA

<213> ARTIFICIAL

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<223> Primer

<400> 18

gacgaattc caccagcaga atcgacatat gtacggtcgt aaaaaacgtc g

51

<210> 19

<211> 27

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<222> (15)..(16)

<223> A, T, G, or C

<400> 19

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27

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<223> Primer

<400> 20
accaccggaa

10

<210> 21

<211> 14

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<220>

<223> Primer

<400> 21
tcgaggaac cacc

14

<210> 22

<211> 14

<212> DNA

<213> ARTIFICIAL

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<223> Primer

<400> 22
agctggaac cacc

14

<210> 23

<211> 27

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<222> (15)..(16)

<223> A, T, G, or C

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27

<210> 24

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<213> ARTIFICIAL

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<400> 24
accaaccgga g

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<222> (16)..(17)

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<210> 26

<211> 41

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<223> A, T, G, or C

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41

<210> 27

<211> 19

<212> DNA

<213> ARTIFICIAL

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<400> 27

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19

<210> 28

<211> 57

<212> DNA

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<223> A, T, G, or C

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<222> (22)..(23)

<223> A, T, G, or C

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<221> misc_feature

<222> (25)..(26)

<223> A, T, G, or C

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<222> (28)..(29)

<223> A, T, G, or C

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<221> misc_feature

<222> (31)..(32)

<223> A, T, G, or C

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<221> misc_feature

<222> (34)..(35)

<223> A, T, G, or C

<400> 28

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<210> 29

<211> 21

<212> DNA

<213> ARTIFICIAL

<220>

<223> Primer

<400> 29

tggttctcta gaaactgctg a

21

<210> 30

<211> 18

<212> DNA

<213> ARTIFICIAL

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<223> Primer

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<222> (1)..(2)

<223> A, T, G, or C

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<221> misc_feature

<222> (4)..(5)

<223> A, T, G, or C

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<222> (7)..(8)

<223> A, T, G, or C

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<222> (10)..(11)

<223> A, T, G, or C

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<222> (13)..(14)

<223> A, T, G, or C

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<222> (16)..(17)

<223> A, T, G, or C

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18

<210> 31

<211> 503

<212> DNA

<213> ARTIFICIAL

<220>

<223> Adaptein-1 nucleotide sequence

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aacgacgttc tggccgcgct taagacgaag aaagcatcca aatacgatct tgagtatgca 180
gatgtgccac agaacatgcg ggccgataca ttcaaataca cccatgagaa accccaaggc 240
tattacagct ggcatcatgg agcagtccaa tatgaaaatg ggcgtttcac ggtgccgaaa 300
ggagttgggg ccaagggaga cagcggacga cccattctgg ataaccaggg acgggtggtc 360
gctattgtgc tgggaggtgt gaatgaagga tctaggacag ccccttcagt cytcatgtgy 420
aacaagcttt ctccacatta tgctcaactc gagggagtta ccgtgaagta tactccggag 480
aactgcgagc aatggtaatg agc 503

<210> 32

<211> 503

<212> DNA

<213> ARTIFICIAL

<220>

<223> Adaptein-2 nucleotide sequence

<400> 32

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aacgacgttc tggccgcgct taagacgaag aaagcatcca aatacgatct tgagtatgca    180
gatgtgccac agaacatgcg ggccgataca ttcaaataca cccatgagaa accccaaggc    240
tattacagct ggcatcatgg agcagtccaa tatgaaaatg ggcgtttcac ggtgccgaaa    300
ggagttgggg ccaagggaga cagcggacga cccattctgg ataaccaggg acgggtggtc    360
gctattgtgc tgggaggtgt gaatgaagga tctaggacag ccctttcagt cgtcatgtgg    420
aacaagctta gaagcggtag tcaatggctc gagggagtta ccgtgaagta tactccggag    480
aactgcgagc aatggtaatg agc                                           503
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<210> 33

<211> 165

<212> PRT

<213> ARTIFICIAL

<220>

<223> Adaptein-1 amino acid sequence

<400> 33

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Lys Ile Asn Gly Tyr Ala Cys Val Val Gly Gly Lys Leu Phe Arg Pro
20        25        30
Met His Val Glu Gly Lys Ile Asp Asn Asp Val Leu Ala Ala Leu Lys
35        40        45
Thr Lys Lys Ala Ser Lys Tyr Asp Leu Glu Tyr Ala Asp Val Pro Gln
50        55        60
Asn Met Arg Ala Asp Thr Phe Lys Tyr Thr His Glu Lys Pro Gln Gly
65        70        75        80
Tyr Tyr Ser Trp His His Gly Ala Val Gln Tyr Glu Asn Gly Arg Phe
85        90        95
Thr Val Pro Lys Gly Val Gly Ala Lys Gly Asp Ser Gly Arg Pro Ile
100       105       110
Leu Asp Asn Gln Gly Arg Val Val Ala Ile Val Leu Gly Gly Val Asn
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115 120 125
 Glu Gly Ser Arg Thr Ala Leu Ser Val Val Met Trp Asn Lys Leu Ser
 130 135 140
 Pro His Tyr Ala Gln Leu Glu Gly Val Thr Val Lys Tyr Thr Pro Glu
 145 150 155 160
 Asn Cys Glu Gln Trp
 165

<210> 34

<211> 165

<212> PRT

<213> ARTIFICIAL

<220>

<223> Adaptein-2 amino acid sequence

<400> 34

Val Met Lys Leu Glu Ser Asp Lys Thr Phe Pro Ile Met Leu Glu Gly
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 20 25 30
 Met His Val Glu Gly Lys Ile Asp Asn Asp Val Leu Ala Ala Leu Lys
 35 40 45
 Thr Lys Lys Ala Ser Lys Tyr Asp Leu Glu Tyr Ala Asp Val Pro Gln
 50 55 60
 Asn Met Arg Ala Asp Thr Phe Lys Tyr Thr His Glu Lys Pro Gln Gly
 65 70 75 80
 Tyr Tyr Ser Trp His His Gly Ala Val Gln Tyr Glu Asn Gly Arg Phe
 85 90 95
 Thr Val Pro Lys Gly Val Gly Ala Lys Gly Asp Ser Gly Arg Pro Ile
 100 105 110
 Leu Asp Asn Gln Gly Arg Val Val Ala Ile Val Leu Gly Gly Val Asn
 115 120 125
 Glu Gly Ser Arg Thr Ala Leu Ser Val Val Met Trp Asn Lys Leu Arg
 130 135 140
 Ser Gly Thr Gln Trp Leu Glu Gly Val Thr Val Lys Tyr Thr Pro Glu
 145 150 155 160
 Asn Cys Glu Gln Trp
 165

<210> 35

<211> 58

<212> DNA

<213> ARTIFICIAL

<220>

<223> Primer

<400> 35

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<210> 36

<211> 42

<212> DNA

<213> ARTIFICIAL

<220>

<223> Primer

<400> 36

gaattcggat cctcattacc attgctcgca gttctccgga gt 42